

## Text Mining in Chinese Ancient Attires

Starting from the Shang Dynasty (1600-1046 BCE) when writing system appeared in China, clothing was recorded as symbols to denote social statuses. The hierarchical signification of clothing remained in the following dynasties until the end of imperial China in 1911. The imperial period produced twenty-five official dynastic histories with rich corpuses on the subject of attire, documenting regulations and prohibitions of detailed dress code, a subject being scarcely studied and treated with assumptions today. This research will use text mining tools to identify descriptive words of clothing that reflect Chinese hierarchal ideology from the twenty-five histories. The method is to retrieve words with high frequencies to discover models and trends of Chinese clothing diachronically and thematically, particularly in three aspects: patterns, colors, and materials. Firstly, patterns in animal motifs are well-known identity markers for official ranking, but an exploration of popular motifs of a period as well as variations through time is needed. Secondly, colors of attires reflect social order because they symbolized directions of natural world. Therefore, dominant colors of different classes and periods might have reflected changing ideas of cosmology over time. Thirdly, the amount of luxurious fabrics and sophisticated technique employed in different periods displayed actual imperial attitudes toward frugality, a merit advocated by all imperial rulers in principle. This study synthesizes disciplines of information system, art history, and Chinese philology, using quantitative analyses to examine ideological changes over time. Although digital methods are not novel in humanity, this study exemplifies such methods applied to foreign languages.